Page 8, line 31 insert SEQ ID NO 014 before **CK19** and SEQ ID NO 020 before **EpCAM**

Page 9, line 7 insert SEQ ID NO 014 before **CK19**

Page 9, line 8 insert SEQ ID NO 014 before **CK19**

Page 9, line 17 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 031 before **MGB1** and SEQ ID NO 032 before **MGB2** and SEQ ID NO 011 before **CK8** and SEQ ID NO 014 before **CK19** and SEQ ID NO 044 before **PIP** and SEQ ID NO 020 before **EpCAM**

Page 10, line 5 insert SEQ ID NO 002 before **Androgen Receptor (AR)** and SEQ ID NO 025 before **Hepsin (HPN)**

Page 10, line 6 insert SEQ ID NO 036 before **multidrug resistance (MDR1)**

Page 16, line 14 insert SEQ ID NO 031 before **mammoglobin 1 (MGB1)** and SEQ ID NO 032 before **mammoglobin 2 (MGB2)**

Page 16, line 15 insert SEQ ID NO 044 before **Prolactin inducible protein (PIP)** and SEQ ID NO 005 before **carcinoembryonic antigen (CEA)** and SEQ ID NO 041 before **prostate specific antigen (PSA)**

Page 16, line 16 insert SEQ ID NO 042 before **prostate specific membrane antigen (PSMA)** and SEQ ID NO 029 before **glandular kallikrein 2 (hK2)** and SEQ ID NO 002 before **androgen receptor (AR)**

Page 16, line 17 insert SEQ ID NO 025 before **Hespin (HPN)** and SEQ ID NO 016 before **DD3** and SEQ ID NO 038 before **Her-2/Neu** and SEQ ID NO 004 before **BCL2** and SEQ ID NO 019 before **epidermal growth factor receptor (EGFR)**

Page 16, line 18 insert SEQ ID NO 027 before **tyrosine kinase-type receptor (HER2)** and SEQ ID NO 054 before **thymidylate synthetase (TS)**

Page 16, line 19 insert SEQ ID NO 055 before **vascular endothelial growth factor (VEGF)** and SEQ ID NO 039 before **pancreatic mucin (Muc1)** and SEQ ID NO 024 before **guanylyl cyclase c (GC-C)**

Page 16, line 20 insert SEQ ID NO 040 before **phosphatidylinositol 3 kinase (PIK3CG)** and SEQ ID NO 045 before **protein kinase B gamma (AKT)** and SEQ ID NO 023 before **excision repair protein (ERCC1)**

2

Page 16, line 21 insert SEQ ID NO 001 before **alpha-1 globin (F6)** and SEQ ID NO 030 before **macrophage inhibitory cytokin-1 (G6)** and SEQ ID NO 018 before **dihydropyrimidin dehydrogenase (DPYD)**

Page 16, line 22 insert SEQ ID NO 054 before **insulin growth factor receptor (IGF2)** and SEQ ID NO 021 before **estrogen receptors alpha and** SEQ ID NO 022 before **estrogen receptors beta**

Page 16, line 23 insert SEQ ID NO 043 before **progesterone receptor (PR)** and SEQ ID NO 003 before **aromatase (cyp19)** and SEQ ID NO 048 before **Telomerase (TERT)**

Page 16, line 24 insert SEQ ID NO 014 before **cytokeratin 19 (CK19)** and SEQ ID NO 010 before **cytokeratin 5 (CK5)** and SEQ ID NO 011 before **cytokeratin 8 (CK8)** and SEQ ID NO 012 before **cytokeratin 10 (CK10)**

Page 16, line 25 insert SEQ ID NO 015 before **cytokeratin 20 (CK 20)** and SEQ ID NO 020 before **epithelial cell adhesion molecule (EpCAM)**

Page 16, line 26 insert SEQ ID NO 039 before **mucin 1 (MUC 1)** and SEQ ID NO 056 before **urokinase plasminogen activator (uPA)**

Page 16, line 27 insert SEQ ID NO 057 before **urokinase plasminogen activator receptor (uPAR)** and SEQ ID NO 033 and SEQ ID NO 034 before **matrix metalloproteinases (MMP)**

Page 16, line 28 insert SEQ ID NO 001 before **alpha-1-globin** and SEQ ID NO 006 before **CD 16** and SEQ ID NO 009 before **CD 45** and SEQ ID NO 007 before **CD 31**

Page 26, line 8   insert SEQ ID NO 058 before
5-TCTAGTCGACGGCCAGTGAATTGTAATACGACTCACTATAGGGCG(T)$_{21}$3

Page 27, line 10 insert SEQ ID NO 041 before **prostate specific antigen (PSA)** and SEQ ID NO 042 before **PSM** and SEQ ID NO 014 before **CK19** and SEQ ID NO 020 before **EpCAM**

Page 27, line 11 insert SEQ ID NO 002 before **AR** and SEQ ID NO 025 before **HPN** and SEQ ID NO 001 before **F6** and SEQ ID NO 031 and SEQ ID NO 032 before **mamoglobin**

3

Page 33, line 13 insert SEQ ID NO 006 before **cluster determinant 16** and SEQ ID NO 009 before **CD 45** and SEQ ID NO 007 before **CD 31**

Page 33, line 14 insert SEQ ID NO 030 before **macrophage inhibitory cytokine 1**

Page 33, line 15 insert SEQ ID NO 011 before **cytokeratin 8** and SEQ ID NO 013 before **cytokeratin 18** and SEQ ID NO 014 before **cytokeratin 19** and SEQ ID NO 020 before **epithelial cell adhesion molecule**

Page 33, line 16 insert SEQ ID NO 056 before **urokinase plasminogen activator**

Page 40, line 6 insert SEQ ID NO 041 before **prostate specific antigen** and SEQ ID NO 042 before **prostate specific membrane antigen** and SEQ ID NO 002 before **androgen receptor**

Page 40, line 7 insert SEQ ID NO 020 before **epithelial cell adhesion molecule**

Page 40, line 18 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 002 before **AR** and SEQ ID NO 020 before **EpCAM**

Page 41, Table insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 002 before **AR** and SEQ ID NO 020 before **EpCAM** and SEQ ID NO 001 before **F6**

Page 42, line 20 insert SEQ ID NO 014 before **CK 19**

Page 42, line 21 insert SEQ ID NO 020 before **EpCAM**

Page 42, line 26 insert SEQ ID NO 001 before **alpha globin**

Page 44, line 10 insert SEQ ID NO 014 before **CK 19**

Page 44, line 11 insert SEQ ID NO 020 before **EpCAM**

Page 44, line 12 insert SEQ ID NO 014 before **CK 19**

Page 44, line 13 insert SEQ ID NO 020 before **EpCAM**

Page 44, line 15 insert SEQ ID NO 020 before **EpCAM**

Page 44, line 21 insert SEQ ID NO 014 before **CK 19** and SEQ ID NO 020 before **EpCAM**

Page 49, line 21 insert SEQ ID NO 014 before **CK 19**

Page 49, line 27 insert SEQ ID NO 014 before **CK 19**

Page 50, line 2 insert SEQ ID NO 014 before **CK 19**

4

Page 50, line 3 insert SEQ ID NO 014 before **CK 19**

Page 50, line 4 insert SEQ ID NO 014 before **CK 19**

Page 50, line 5 insert SEQ ID NO 014 before **CK 19**

Page 50, line 26 insert SEQ ID NO 059 before

5'-TCTAGTCGACGGCCAGTGAATT-3'

Page 51, Table I insert SEQ ID NO 001 before **alpha 1-globin**

Page 51, Table I insert SEQ ID NO 060 before **AAGACCTACTTCCCGCACTT**

Page 51, Table I insert SEQ ID NO 061 before **TATTTGGAGGTCAGCACGGT**

Page 51, Table I insert SEQ ID NO 002 before **AR**

Page 51, Table I insert SEQ ID NO 062 before

ATCTCTGTGCAAGTGCCCAAGAT

Page 51, Table I insert SEQ ID NO 063 before

CAGGAACATGTTCATGACAGACTGT

Page 51, Table I insert SEQ ID NO 004 before **BCL2**

Page 51, Table I insert SEQ ID NO 064 before

GCAAGAGTGACAGTGGATTGCAT

Page 51, Table I insert SEQ ID NO 065 before

CTAATGGTGGCCAACTGGAGACT

Page 51, Table I insert SEQ ID NO 010 before **CK5**

Page 51, Table I insert SEQ ID NO 066 before

AGTCACTGCCTTCCAAGTGCAGCAA

Page 51, Table I insert SEQ ID NO 067 before

GGAAACCTGAAGGCTGATTTGAAGCAG

Page 51, Table I insert SEQ ID NO 011 before **CK8**

Page 51, Table I insert SEQ ID NO 068 before

GTGGTTTGAGCTCGGCCTATGG

Page 51, Table I insert SEQ ID NO 069 before **CCAGTGCTACCCTGCATAGCG**

Page 51, Table I insert SEQ ID NO 012 before **CK10**

Page 51, Table I insert SEQ ID NO 070 before

GACGGTAGAGTTCTTTCATCTACGGTTG

Page 51, Table I insert SEQ ID NO 071 before

GGAAACCACAAAACACCTTGTAGACACC

Page 51, Table I insert SEQ ID NO 013 before **CK18**

Page 51, Table I insert SEQ ID NO 072 before

ACCTTGAGTCAGAGCTGGCACAGA

Page 51, Table I insert SEQ ID NO 073 before

GCTTCTGCTGGCTTAATGCCTCAG

Page 52, Table I insert SEQ ID NO 014 before **CK19**

Page 52, Table I insert SEQ ID NO 074 before

CATATCCAGGCGCTGATCAGCG

Page 52, Table I insert SEQ ID NO 075 before

CAAAGGACAGCAGAAGCCCCAG

Page 52, Table I insert SEQ ID NO 016 before **DD3**

Page 52, Table I insert SEQ ID NO 076 before

GTAAGCCTGGGATGTGAAGCAAAGG

Page 52, Table I insert SEQ ID NO 077 before

GAACCCTAAAGTGGCTCACAAGAGTG

Page 52, Table I insert SEQ ID NO 019 before **EGFR**

Page 52, Table I insert SEQ ID NO 078 before

CCTGTAACCTGACTGGTTAACAGCAG

Page 52, Table I insert SEQ ID NO 079 before

GGCTCTGACTGATCTGGGAGTCA

Page 52, Table I insert SEQ ID NO 020 before **EpCAM**

Page 52, Table I insert SEQ ID NO 080 before

GAGATGCATAGGGAACTCAATGC

Page 52, Table I insert SEQ ID NO 081 before

ACGATGGAGTCCAAGTTCTGGAT

Page 52, Table I insert SEQ ID NO 021 before **ER-a**

Page 52, Table I insert SEQ ID NO 082 before

AGCAGGTGCCTGAGACACAGA

Page 52, Table I insert SEQ ID NO 083 before

TCGAGCATCCCGCTGGATTCTT

Page 52, Table I insert SEQ ID NO 022 before **ER-b**

Page 52, Table I insert SEQ ID NO 084 before

GGAAGCTGGCTCACTTGCTGAA

Page 52, Table I insert SEQ ID NO 085 before

GAAGCACGTGGGCATTCAGCAT

Page 52, Table I insert SEQ ID NO 038 before **Her2Neu**

Page 52, Table I insert SEQ ID NO 086 before

TCGTTGGAAGAGGAACAGCACTG

Page 52, Table I insert SEQ ID NO 087 before

AGCCTGGATACTGACACCATTGC

Page 52, Table I insert SEQ ID NO 029 before **HK2**

Page 52, Table I insert SEQ ID NO 088 before **CACACCATGCAGGATGACAT**

Page 52, Table I insert SEQ ID NO 089 before **GCATTCCACAAGGTTCTCAG**

Page 52, Table I insert SEQ ID NO 036 before **MDR1**

Page 52, Table I insert SEQ ID NO 090 before

AGTGTCCAGGCTGGAACAAAG

Page 52, Table I insert SEQ ID NO 091 before

CTCCACTTGATGATGTCTCTCAC

Page 52, Table I insert SEQ ID NO 031 before **MGB1**

Page 52, Table I insert SEQ ID NO 092 before

CTCCCAGCACTGCTACGCAGGC

Page 52, Table I insert SEQ ID NO 093 before

GACATAAGAAAGAGAAGGTGTGGT

Page 52, Table I insert SEQ ID NO 032 before **MGB2**

Page 52, Table I insert SEQ ID NO 094 before

CTCCTCCTGCACTGCTATGCAGAT

Page 52, Table I insert SEQ ID NO 095 before

ACACCAAATGCTGTCGTACACTGTATGCA

Page 52, Table I insert SEQ ID NO 030 before **Mic1**

Page 52, Table I insert SEQ ID NO 096 before CTACAATCCCATGGTGCTCA

Page 52, Table I insert SEQ ID NO 097 before

ACACAGTTCCATCAGACCAGG

Page 52, Table I insert SEQ ID NO 033 before MMP2

Page 52, Table I insert SEQ ID NO 098 before

ACTGCTGGCTGCCTTAGAACCTT

Page 52, Table I insert SEQ ID NO 099 before

GAGAAGAGACTCGGTAGGGACAT

Page 52, Table I insert SEQ ID NO 034 before MMP9

Page 52, Table I insert SEQ ID NO 100 before

CGTCTTCCAGTACCGAGAGAAAG

Page 52, Table I insert SEQ ID NO 101 before

TGTATCCGGCAAACTGGCTCCTT

Page 52, Table I insert SEQ ID NO 035 before MRP

Page 52, Table I insert SEQ ID NO 102 before

GGTGATCGTCTTGGACAAAGGAG

Page 52, Table I insert SEQ ID NO 103 before

TCTTCACAGCCAGTTCCAGGCAG

Page 52, Table I insert SEQ ID NO 039 before MUC1

Page 52, Table I insert SEQ ID NO 104 before

AACGGTGGCAGCAGCCTCTCTTA

Page 52, Table I insert SEQ ID NO 105 before

GCTTCCACACACTGAGAAGTGTCCG

Page 52, Table I insert SEQ ID NO 037 before NKX3A

Page 52, Table I insert SEQ ID NO 106 before

GGAAGTTCAGCCATCAGAAGTAC

Page 52, Table I insert SEQ ID NO 107 before GGTATGGGTAGTAAGGATAG

Page 52, Table I insert SEQ ID NO 047 before p53

Page 52, Table I insert SEQ ID NO 108 before

CTGCCTCAGCCTCCGGAGTAGCT

8

Page 52, Table I insert SEQ ID NO 109 before

GTGGGGTGAAAATGCAGATGTGC

Page 52, Table I insert SEQ ID NO 044 before PIP

Page 52, Table I insert SEQ ID NO 110 before

CAGAACTGTGCAAATTGCAGCCGTC

Page 52, Table I insert SEQ ID NO 111 before

AGACCACAGCAGAAATTCCAGCCAAG

Page 52, Table I insert SEQ ID NO 041 before PSA

Page 52, Table I insert SEQ ID NO 112 before

TGAAGCACTGAGCAGAAGCTGGA

Page 53, Table I insert SEQ ID NO 113 before

GAGGGTTGTCTGGAGGACTTCAA

Page 53, Table I insert SEQ ID NO 046 before PSGR

Page 53, Table I insert SEQ ID NO 114 before

ACACCGCTTTGGAAACAGCCTTCATC

Page 53, Table I insert SEQ ID NO 115 before

GTACTGATGTGCTTATGGGCAACTGG

Page 53, Table I insert SEQ ID NO 042 before PSM

Page 53, Table I insert SEQ ID NO 116 before

AGTTCAGTGAGAGACTCCAGGAC

Page 53, Table I insert SEQ ID NO 117 before

CTGCACTGTGAAGGCTGCAACAT

Page 53, Table I insert SEQ ID NO 048 before TERT

Page 53, Table I insert SEQ ID NO 118 before

AGCACACCTGCCGTCTTCACTT

Page 53, Table I insert SEQ ID NO 119 before

GGCACACCTTTGGTCACTCCAA

Page 53, Table I insert SEQ ID NO 049 before Timp1

Page 53, Table I insert SEQ ID NO 120 before

CCAAGACCTACACTGTTGGCTGT

Page 53, Table I insert SEQ ID NO 121 before
ACTGTGCAGGCTTCAGTTCCACT
Page 53, Table I insert SEQ ID NO 050 before **Timp2**
Page 53, Table I insert SEQ ID NO 122 before
TGGGCTGCGAGTGCAAGATCAC
Page 53, Table I insert SEQ ID NO 123 before
CTGCTTATGGGTCCTCGATGTC
Page 53, Table I insert SEQ ID NO 051 before **Topo2a**
Page 53, Table I insert SEQ ID NO 124 before
GCCATCCACTTCTGATGATTCTG
Page 53, Table I insert SEQ ID NO 125 before
ACCAGTCTTGGGCTTGGTAAGA
Page 53, Table I insert SEQ ID NO 052 before **Topo2b**
Page 53, Table I insert SEQ ID NO 126 before
AAGCCCAAGAGAGCCCCAAAAC
Page 53, Table I insert SEQ ID NO 127 before
TGGCAGAGAAGGTGGCTCAGTA
Page 53, Table I insert SEQ ID NO 053 before **TROP2**
Page 53, Table I insert SEQ ID NO 128 before
TGTTGCTACTCTGGTGTGTCCCAAG
Page 53, Table I insert SEQ ID NO 129 before
CTGGGATTCAAAGGAGGTACAGCTC
Page 53, Table I insert SEQ ID NO 056 before **uPA**
Page 53, Table I insert SEQ ID NO 130 before
TGGGCTGTGAGTGTAAGTGTGAG
Page 53, Table I insert SEQ ID NO 131 before
CACCCAGTGAGGATTGGATGAAC
Page 54, line 7 insert SEQ ID NO 014 before **CK19**
Page 54, line 8 insert SEQ ID NO 014 before **CK19**
Page 54, line 9 insert SEQ ID NO 014 before **CK19** and SEQ ID NO 010 before
    CK5 and SEQ ID NO 053 before **TROP2**

Page 54, line 12 insert SEQ ID NO 020 before **EpCAM** and SEQ ID NO 039 before **Muc-1** and SEQ ID NO 030 before **Mic-1**

Page 54, line 15 insert SEQ ID NO 014 before **CK19** and SEQ ID NO 020 before **EpCAM** and SEQ ID NO 039 before **Muc-1**

Page 54, line 1 insert SEQ ID NO 014 before **CK19**

Page 54, line 2 insert SEQ ID NO 014 before **CK19**

Page 54, line 3 insert SEQ ID NO 014 before **CK19**

Page 54, line 8 insert SEQ ID NO 014 before **CK19**

Page 54, line 14 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 002 before **AR** and SEQ ID NO 025 before **HPN** and SEQ ID NO 014 before **CK19**

Page 54, line 15 insert SEQ ID NO 020 before **EpCAM**

Page 54, line 24 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 031 before **MGB1**

Page 54, line 25 insert SEQ ID NO 032 before **MGB2** and SEQ ID NO 044 before **PIP** and SEQ ID NO 011 before **CK 8** and SEQ ID NO 014 before **CK 19** and SEQ ID NO 020 before **EpCAM**

Page 57, line 6 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 026 before **HK2** and SEQ ID NO 025 before **HPN**

Page 57, line 7 insert SEQ ID NO 046 before **PSGR** and SEQ ID NO 016 before **DD3** and SEQ ID NO 031 before **MGB1** and SEQ ID NO 032 before **MGB2**

Page 57, line 8 insert SEQ ID NO 025 before **HPN**

Page 57, line 9 insert SEQ ID NO 041 before **PSA**

Page 57, line 10 insert SEQ ID NO 042 before **PSM** and SEQ ID NO 025 before **HPN** and SEQ ID NO 029 before **hK2** and SEQ ID NO 046 before **PSGR**

Page 57, line 11 insert SEQ ID NO 016 before **DD3** and SEQ ID NO 031 before **mamaglobin 1** and SEQ ID NO 032 before **mamaglobin 2**

Page 57, line 12 insert SEQ ID NO 031 before **MBG1** and SEQ ID NO 032 before **MBG2**

Page 57, line 13 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM**

11

Page 57, line 14 insert SEQ ID NO 025 before **HPN**

Page 57, line 15 insert SEQ ID NO 025 before **Hepsin** and SEQ ID NO 042 before **PSM**

Page 57, line 20 insert SEQ ID NO 002 before **AR** and SEQ ID NO 037 before **NKX3A** and SEQ ID NO 019 before **EGFR** and SEQ ID NO 021 and SEQ ID NO 022 before **ER** and SEQ ID NO 036 before **MDR1** and SEQ ID NO 035 before **MRP**

Page 57, line 21 insert SEQ ID NO 051 before **Topo2a**

Page 57, line 22 insert SEQ ID NO 002 before **AR** and SEQ ID NO 037 before **NKX3A**

Page 57, line 23 insert SEQ ID NO 051 before **Topo2a** Page 65, line 26 insert SEQ ID NO 036 before **MDR1** and SEQ ID NO 019 before **EGFR** and SEQ ID NO 021 and SEQ ID NO 022 before **ER**

Page 57, line 24 insert SEQ ID NO 036 before **MDR1** and SEQ ID NO 035 before **MRP**

Page 58, line 1 insert SEQ ID NO 036 before **MDR1**
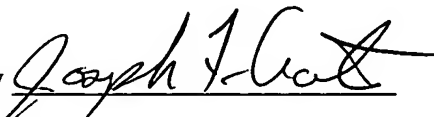
Page 58, line 2 insert SEQ ID NO 002 before **AR**

Page 58, line 3 insert SEQ ID NO 036 before **MDR1**

Page 58, line 4 insert SEQ ID NO 002 before **AR**

Page 58, line 6 insert SEQ ID NO 002 before **AR**

Page 58, line 7 insert SEQ ID NO 025 before **Hepsin**

Respectfully submitted,
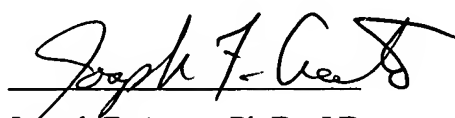
By Joseph F. Aceto

Joseph F. Aceto, Ph.D., J.D.
PTO Registration No. 50,701
Telephone No. 215-830-0777, x237

Statement of Sequence Listing Information

I herby state that the information recorded in computer readable form is identical to the written (compact disc) sequence listing included.

I further herbly state that this submission, filed in accordance with 37 CFR 1.821(g), herein does not include new matter or matter which goes beyond the disclosure in the international application.

Joseph F. Aceto, Ph.D., J.D.
PTO Registration No. 50,701